CLAIMS

1. A sample holder system for an automated sample analyzer, comprising:

a first well strip comprising a plurality of wells and a first end and a second end;

at least a second well strip comprising a plurality of wells and a first and a second end; and

an interlocking device comprising a first engagement piece disposed on said first well strip and a second engagement piece disposed on the second well strip wherein said first and second engagement pieces cooperate to reversibly attach said first well strip with said second well strip to form a sample holder system.

3. The sample holder system of claim 2 wherein said first well strip and said second well strip are substantially the same.

4. The sample holder system of claim 2 wherein said first engagement piece is positioned substantially adjacent the first end of the first well strip and the second engagement piece is positioned substantially adjacent the second end of said second well strip.

5. The sample holder system of claim 2 wherein said first engagement piece is positioned on a first side wall of said first well strip and said second engagement piece is positioned on a second side wall of said second well strip.

6. The sample holder system of claim 2 wherein said first and second engagement pieces are reversibly interlockable by horizontally sliding said first well strip relative to said second well strip.

7. The sample holder system of claim 2 comprising:

a second engagement piece positioned at the second end of the first well strip; and

a first engagement piece positioned at the second end of the second well strip.

8. The sample holder system of claim 1 wherein said first engagement piece comprises a flange and said second engagement piece comprises a slot and a slit.

9. The sample holder system of claim 5 wherein said first engagement piece positioned at the first end of the first well strip comprises a flange, and said second engagement piece positioned at said second end of said second well strip comprises a slot and a slit.

10. The sample holder system of claim 7 wherein said second engagement piece positioned at the second end of said first well strip comprises a slot and said first engagement piece positioned at said second end of said second well strip comprises a flange.

11. The sample holder system of claim 1 wherein said interlocking device comprises a first engagement piece and a second engagement piece.

12. A well strip, comprising:

a plurality of wells;

a first engagement piece; and

a second engagement piece, wherein

said first engagement piece is configured to interlock with a complementary second engagement piece of another well strip, and said second engagement piece of said well strip is configured to interlock with a complementary first engagement piece of another well strip.

13. The well strip of claim 12 wherein said first engagement piece is substantially positioned near a first end of said well strip and said second engagement piece is substantially positioned near a second end of said well strip.

14. The well strip of claim 12 wherein said first engagement piece is positioned on a first wall of said well strip and said second engagement piece is positioned on a second wall of said well strip.

15. The well strip of claim 12 wherein said first engagement piece comprises a flange and said second engagement piece comprises a slot and a slit.

16. The first well strip of claim 13 further comprising a second engagement piece at said first end and a first engagement piece at said second end.

17. A method for increasing the load capacity of an automated sample analyzer, comprising the step of:

interlocking at least a first well strip and a second well strip together to form a sample holder system, said first and second well strips comprising a plurality of sample wells.

18. The method of claim 17 further comprising:

loading a plurality of said sample holder systems onto said automated sample analyzer;

detaching a first well strip from said sample holder system by disengaging said first well strip from a second well strip;

moving said first well strip; and,

analyzing said samples in said plurality of wells in said first well strip.

19. The method of claim 17 wherein interlocking a plurality of well strips to form a sample holder system comprises slidably moving said first well strip horizontally relative to second well strip to engage said first and second well strips.

20. The method of claim 17 further comprising introducing a sample into said sample wells wherein said sample comprises a body fluid.

21. The method of claim 20 wherein said body fluid comprises blood.

22. The method of claim 20 wherein said body fluid comprises urine.

23. The method of claim 20 wherein said body fluid comprises serum.

24. The method of claim 18 wherein said sample analysis comprises analyzing said sample for a coagulation disorder.

25. The method of claim 18 wherein said sample analysis comprises analyzing said sample for electrolyte concentration.

26. The method of clam 18 wherein said sample analysis comprises analyzing said sample to determine the presence or concentration of a drug.

27. A sample holder system comprising:

a first well strip comprising a plurality of wells, a first and second side wall, and a first and second end; and,

at least a second well strip comprising a plurality of wells, a first and second side wall, and a first and a second end;

each of said first well strip and said at least a second well strip further comprising a flange on said first end of said first side wall, a slot on said second end of said first side wall, a slot on said first end of said second side wall, and a flange on said second end of said second side wall, wherein said slot and flange of said at least a second side wall of said first well strip interlocks with said flange and said slot of said first side wall of said second well strip to form a sample holder system.